



Department of Defense INSTRUCTION

NUMBER 5000.56

September 11, 1991

ASD(C3I)

SUBJECT: Programming Unique Mapping, Charting, and Geodesy (MC&G)
Requirements for Developing Systems

- References:
- (a) Deputy Secretary of Defense Memorandum, "Program Decision Memorandum (PDM) for Defense Mapping Agency (DMA) Programs," August 22, 1985
 - (b) Deputy Secretary of Defense Memorandum, "Implementation of August 1985 PDM for DMA Programs," June 6, 1986
 - (c) DoD Directive 5105.40, "Defense Mapping Agency (DMA)," December 6, 1990
 - (d) [DoD Directive 5000.1](#), "Defense Acquisition," February 23, 1991
 - (e) DoD Instruction 5000.2, "Defense Acquisition Management Policies and Procedures," February 23, 1991
 - (f) [DoD Directive 5137.1](#), "Assistant Secretary of Defense for Command, Control, Communications, and Intelligence," March 27, 1990

1. PURPOSE

This Instruction establishes policy, assigns responsibilities, and prescribes procedures for the identification and funding of any unique MC&G product required by a system under development or upgrade in accordance with references (a), (b), and (c).

2. APPLICABILITY AND SCOPE

2.1. This Instruction applies to the Office of Secretary of Defense (OSD), the Military Departments, the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Unified and Specified Commands and the Defense Agencies (hereafter referred to collectively as "the DoD Components").

2.2. Applicability to a DoD Component shall be based on the level of resources necessary to satisfy a system requirement for an MC&G-unique product. This Instruction applies to a system if, in a Future Year Defense Program, it requires MC&G resources of more than \$2 million (based on Fiscal Year (FY) 1990 constant dollars) for Research, Development, Testing, and Evaluation or more than \$6 million (based on FY 1990 constant dollars) for development and/or production. A system requiring MC&G resources below the threshold shall compete for the Defense Mapping Agency's (DMA) baseline resources in the normal Program Objectives Memorandum process. Applicability is independent of designation of a program as a major defense acquisition program or a major system under DoD Directive 5000.1 and DoD Instruction 5000.2 (references (d) and (e)).

2.3. New or upgraded systems that require an increase in standard or derivative MC&G product area requirements or require an increase, regardless of the amount, in production are not covered by this Instruction and shall compete for the existing DMA baseline resources.

3. DEFINITIONS

3.1. Derivative MC&G Product. Any MC&G product directly derivable from any one or more DMA standard products or MC&G data bases.

3.2. Standard MC&G Product. Any MC&G product contained in the DMA List of Standard Products and Services, DMAL 8052.4.

3.3. Unique MC&G Product. Any MC&G product that is not a standard DMA product or a derivative MC&G product.

4. POLICY

It is DoD policy that:

4.1. DoD Components having systems undergoing development or upgrade that will require unique MC&G products (vice derivative or standard MC&G products) in the conduct of the system's operational mission profile must consider the impact of this unique product on the availability of MC&G production resources and, if such impact is above the threshold as specified in paragraph 2.2., fund the MC&G production costs.

4.2. MC&G requirements are to be defined in the Operational Requirements Document (ORD) for Milestone I and subsequent Milestones, as provided in reference (e). Consequently, as a "infrastructure support" component, MC&G requirements are subject to consideration at all system milestone reviews. Using the MC&G requirements defined in the ORD, the DMA and the applicable DoD Component(s) shall follow the procedures in section 5., below, to identify any unique product requirements and to program funding support.

4.3. Biennial transfers of funds will usually commence between Milestones II and III and will continue as specified in a Memorandum of Agreement (MOA). A Program Budget Decision will make a transfer of funds for each 2-year budget cycle. If DMA cost estimates are revised subsequent to the transfer, it will be DMA's responsibility to notify the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C3I)) to make the appropriate changes.

4.4. If a new system is a functional replacement or otherwise affects force structure, the associated MC&G requirement may supplant or truncate earlier requirements, reducing the net marginal cost to the DMA and, thus, reduce funding requirements levied on the system-proponent DoD Component.

4.5. References (d) and (e) and any statutory requirements shall take precedence over any conflicting provisions established by this Instruction.

5. RESPONSIBILITIES

5.1. The Assistant Secretary of Defense for Command, Control, Communications, and Intelligence shall:

5.1.1. As provided in reference (f), carry out the assigned responsibilities for MC&G.

5.1.2. Adjudicate issues that cannot be resolved by direct DMA and DoD Component negotiation. Either the DMA or the DoD Component may elevate an issue arising from definition or funding of unique MC&G products or services.

5.1.3. Recommend the formal transfer of funds budgeted for the unique MC&G product requirements from the DoD Component accounts to the appropriate DMA accounts during the OSD budget review.

5.2. The Secretaries of the Military Departments; the Chairman of the Joint Chiefs of Staff; the Commanders of Unified and Specified Commands; and the Heads of the Defense Agencies, except the Defense Mapping Agency, shall:

5.2.1. For each system requiring unique MC&G products, consult the DMA at the requirements definition and subsequent phases.

5.2.2. Consult with the Chairman of the Joint Chiefs of Staff and the Commanders of the Unified and Specified Commands, as appropriate, for each system development requiring unique MC&G product support, to examine deployment alternatives, and to forecast area requirements associated with initial fielding and full operational deployment. An MC&G requirements profile shall be formulated based on the projected area requirements and the new system's unit acquisition rate and delivery schedule. Force planning must be considered as the deployment role of each system is assessed.

5.2.3. Program for all system MC&G marginal costs based on DMA-provided estimates. The programmed funding shall be explicitly identified with the system development program element in all program and/or budget exhibits. Sufficient funding will be maintained to provide for necessary start-up, continuation, and phase-down of DMA production efforts, pending formal biennial transfer of funds to the DMA.

5.2.4. Within the developing system's engineering and manufacturing development phase, and before the Milestone III decision, enter into a MOA with the DMA covering MC&G production profiles and the attendant costs.

5.2.5. Ensure proper consideration is given to MC&G topics during Component acquisition review and in the development process.

5.3. The Director, Defense Mapping Agency, shall:

5.3.1. Evaluate product requirements proposed by a DoD Component and submit the evaluation to the DoD Component and the ASD(C3I) with recommendations.

5.3.2. Develop a military specification for a product that satisfies the coordinated and validated system MC&G requirements. This specification will normally be available after Milestone II.

5.3.3. Develop a production schedule based on the MC&G requirements profile negotiated in paragraph 5.2.2., above.

5.3.4. Determine and isolate the cost to the DMA of satisfying the unique MC&G product requirement. All applicable elements of expense shall be considered, including, but not limited to, ramp-up costs such as hiring and training of new personnel, site preparation, equipment procurement, and fixed plant investment as well as all costs for maintenance of a full production posture. Phase-down costs that would result from program cancellation or program completion should also be identified. General purpose items (e.g., mainframe computers) not specifically dedicated to a unique MC&G product shall be funded by the DMA and shall not be considered in this process. Marginal costs in these categories specifically assessable as system-unique in application shall initially be funded by the system-proponent DoD Component, pending formal transfer of funds to the DMA.

5.3.5. Determine, for system-proponent DoD Component and ASD(C3I) coordination, the most economical source for satisfying the unique MC&G product requirement by comparing the cost of in-house DMA production with the cost of contracting to the commercial sector or to another DoD Component. If contracted, the DMA shall still retain the responsibility for satisfying the requirement.

5.3.6. Within the developing system's engineering and manufacturing development phase and before its Milestone III decision, prepare for ASD(C3I) coordination a MOA with the appropriate system-proponent DoD Component. The MOA must identify the annual MC&G production profiles, the attendant costs to be borne by the DoD Component, and, if appropriate, the date at which the "unique MC&G product" would be classified as a "standard MC&G product" with any subsequent production funded within DMA's baseline. Implementing signatories shall be the Director, DMA, and the Head of the DoD Component.

5.3.7. Establish and maintain a list of DoD systems whose MC&G requirements are satisfied by unique MC&G products and services. The list shall have three parts:

5.3.7.1. Pre-policy systems whose unique requirements are an established part of DMA baseline funding.

5.3.7.2. Systems whose unique requirements are considered less than the funding threshold.

5.3.7.3. Systems whose unique requirements are above the funding threshold.

6. PROCEDURES

The Heads of the DoD Components under section 5., above, shall ensure compliance with this Instruction by issuing implementing documents.

7. EFFECTIVE DATE AND IMPLEMENTATION

This Instruction is effective immediately. DoD Components shall forward one copy of implementing documents to the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence within 120 days.

A handwritten signature in black ink, appearing to read "Duane P. Andrews", is positioned above the typed name.

DUANE P. ANDREWS
Assistant Secretary of Defense
(Command, Control, Communications
and Intelligence)